Reflections on the Financial Crisis

December 2011

Reflections on the Financial Crisis

Richard N. Cooper

Harvard University

The financial crisis of 2007-2008 basically reflected a failure of the financial system as a whole. One can imagine (contrary to fact) that every participant within this complex, global system was behaving "rationally," that is, looking after his/her own narrow interests within the existing legal and regulatory framework, and that the regulators were all doing their jobs responsibly from their perspective, and the system would nonetheless have failed. Of course, in reality there were knowing miscreants and regulators who were not performing well, indeed who objected to some of the regulations they were enjoined to enforce; but these people did not cause the system to collapse. Nor was it simply bad luck, an adverse external event (such as an earthquake or a sun-induced power outage) that can sometimes bring down a system that is not robust to such shocks. Rather, it was the internal dynamics of the system itself that brought it to a state of collapse.

Any system of financial regulation, by placing limits on the behavior of the regulated institutions (such as deposit-taking banks) ipso facto creates financial incentives to arbitrage around the regulations. Astute lawyers will seek and generally find novel arrangements that formally conform to the regulations but engage in activities that the regulations were designed to discourage. Over time, new institutional arrangements will be found to by-pass the regulatory obstacles that have been imposed on the banks, to stay with that example. Initially this arbitrage will be small and non-threatening to the system as a whole, even to the regulated institutions; but unless checked it will build over time to a point at which it becomes quantitatively important, threatening to the regulated institutions, and even threatening to the entire system. The regulated institutions will plead for relief from the regulations, permitting them to participate to some extent in the arbitrage. Astute and prescient regulators will extend the regulations to cover these innovative activities before they reach this point. But it takes enormous political courage to stop the party just when everything seems to be going well. The mood of euphoria is hard to resist. So periodic financial crises are an inevitable characteristic of a dynamic, ever-changing innovative economy.

Many features of the US financial system played their role in bringing about the crisis, but most circle back to the high financial rewards associated with transactions and with short-term performance. Investment bankers, their lawyers and law firms, rating agencies, accountants insisting on pro-cyclical accounting rules, hedge funds, mutual funds – all played their roles. Each pursued its narrow interests within the existing legal and regulatory framework, taking for granted the continued smooth functioning of that system. None paid attention to the system as a whole, and concretely to the degree of leverage and to the mismatch of maturities that the system was encouraging, financing bond purchases or mortgage portfolios with short-term funds – a practice that presumed the mortgages could quickly and smoothly be packaged into marketable bonds, and that the bonds would remain liquid through well-functioning secondary markets.

The development of a global capital market, implying that excess savings in one part of the world could be readily invested elsewhere in the world, had the effect of lowering long-term interest rates throughout the world, which simultaneously lowered the cost of long-term borrowing, especially of 30-year mortgages to buy homes, and encouraged financial entities accustomed to higher returns to reach for yield, both through greater leverage and through taking on more risk. The former effect in turn increased the demand for housing in the United States (and many other countries, such as Britain, Spain, and Ireland), which raised the prices of existing properties and stimulated new home construction, which in mid-decade reached levels (over 2 million new homes per year in the United

States) well in excess of those justified by new household formation, normal geographic mobility, and destruction of existing housing. Ever rising home prices led to a reduction in mortgage underwriting standards, as collateral with continually rising prices could justify larger loans with less income security. Securitization of mortgages increased access to funds for home purchases, by seeming to make mortgages liquid and drawing in pools of capital that were not historically invested in mortgages.

All of this can be seen in the United States. Interest rates on 30-year mortgages declined from over 8 percent in 2000 to under 6 percent by 2003, resulting in a drop in monthly payments of more than 25 percent. The average price of existing homes rose steadily by more than 48 percent from 2000 to 2005. New single-family home construction starts rose from 1.6 million in 2000 to over 2 million in 2005 (only to fall below 600,000 by 2009). More and more people were able to get mortgage loans, such that home-ownership rose from 67 percent of families in 2000 to over 69 percent of families by 2005. The resulting sub-prime mortgages were packaged into mortgage-backed securities (MBSs), which along with other forms of credit were repackaged into Collateralized Debt Obligations (CDOs), some of which were further repackaged into CDO-squared.

When housing prices stopped rising and short-term interest rates rose on adjustable rate mortgages, some homeowners were unable to make their payments or re-finance their mortgages, some securities came under a cloud, valuation became difficult, secondary markets ceased to function smoothly, short-term lenders developed doubts about the viability of their creditors and ceased to roll over debt, many otherwise liquid securities became highly illiquid, and their owners became questionable as counter-parties in what would otherwise be normal transactions. Parts of the financial market froze up.

None of this had anything to do with global imbalances, beyond their role in lowering long-term interest rates – a condition which, by the way, many economists over the years have considered highly desirable, on the grounds it would stimulate productive investment and thus economic growth. Many analysts forecast that global imbalances would lead to a financial crisis. We indeed had a crisis, but it was not the crisis they foresaw, which would have entailed a massive outflow of foreign funds from the United States – or, more mildly, a significant cessation of inflows – followed by a sharp depreciation of the dollar and a sharp increase in US interest rates to try to stem the outflow and stabilize the dollar. In this crisis, interest rates on US government securities declined to unprecedented lows and the dollar appreciated during its most acute phase.

Some have blamed the Federal Reserve for holding the federal funds rate too low following the high-tech bust of 2001-2002. That criticism may have some merit, but it cannot be a principal explanation for the subsequent financial crisis. The Fed began to raise rates in July 2004 (stock prices – DJ and S&P – reached their nadir in February of 2004). But long-term rates did not respond to the rise in short-term rates – what Fed Chairman Alan Greenspan dubbed at the time a "conundrum," although it should not have been a surprise to anyone aware of the increasing globalization of capital markets.

It is true, as many have since complained, that through a variety of mechanisms US policy has been to encourage home ownership by Americans, including notably the deductability from taxable income of interest payments on mortgages and public support for the mortgage market through several government-chartered institutions. But these policies had been around for decades without causing a financial crisis; they were part of the US financial system, but not a new part.

As home prices began to rise persistently, and as mortgage underwriting standards began to deteriorate, the Federal Reserve could have intervened to the extent of requiring all member banks to insist on minimum down payments on home purchases of, say 15 or 20 percent (as China did in 2007 when it wanted to dampen the housing boom there). But such an action would have stimulated arbitrage by encouraging financial institutions other than banks to originate mortgages, although that would have taken time and some dampening of home construction might have been achieved. But of course it would have evoked huge political outcry from Congress, Republicans as well as Democrats.

I note therefore that periodic financial crises are actually necessary in order to focus policy and especially political attention on the need to adapt and extend financial regulation to cover the quantitatively significant arbitrage around the regulations that has occurred since the last significant revision. Indeed the United States has had roughly a financial crisis a decade. Tweaking the regulations is sometimes not enough, and radical change is impossible in boom times in view of the many vested interests that develop during the boom. In this sense the crisis of 2008 was necessary, but unfortunately it did huge damage to the real economy, worldwide. The policy challenge of the future is to recognize and act on financial crises early enough to forestall serious recession.